

**City of Iqaluit  
2012 Annual Water License Report  
Executive Summary**

Under Water License 3AM-IQA0611 (the License), the City of Iqaluit (the City):

- Extracts water from Lake Geraldine for municipal use,
- Manages its solid waste at the West 40 Landfill, and
- Manages its wastewater at the West 40 Wastewater Treatment Plant and backup Sewage Lagoon.

This License was issued by the Nunavut Water Board (NWB) in 2006 and expired on July 15, 2012. On October 2, 2012, the City submitted its Application for Water License Renewal. In compliance with requirements of Schedule B of the License, this Annual Water License Report summarizes the activities conducted by the City in 2012.

*Monthly Monitoring Program*

In 2012, the City began to implement a Monthly Monitoring Program and also undertook the development of a Quality Assurance/ Quality Control Plan and Monthly Report template. Based on lessons learned in 2012, the Monitoring Program has been adjusted for 2013 to ensure that it meets the requirements of the License.

*Water Supply*

In 2012, the City used 871,670 m<sup>3</sup> of water from the Lake Geraldine, which is below the quantity of water not to be exceeded under the License (1,100,000 m<sup>3</sup>). In July 2012, a Dam Safety Inspection (DSI) was completed on Lake Geraldine Dam and in, October 2012, the north berm repairs were completed as per the 2011 DSI recommendations. In 2012, the City undertook the development of a Water Balance study for Lake Geraldine watershed and also undertook the development of a Supplementary Water Supply Plan and Preliminary Design, which are both expected to be completed in 2013.

*Wastewater Treatment*

In 2012, the Government of Nunavut gave the City notice that its application of the Block Funding was successful. This funding application included the upgrade of the Wastewater Treatment Plant to secondary treatment. This project will be included in the City's upcoming 5-year Capital Plan (2013-2018). In June 2012, a Sewage Lagoon Dam Safety Review Requirement Investigation was completed. It determined that the City's Sewage Lagoon is classified as a Low Risk Dam as per the Canadian Dam Safety Guidelines and, as a result, does not require a Dam Safety Review.

*Solid Waste Management*

The City continues to manage its solid waste at the West 40 Landfill, which is nearing capacity. Landfill runoff continues to be managed through on-site detention ponds and an off-site retention pond. Run-off in the off-site retention pond is filtered through a Geotube before being discharged. Further treatment options are to be included in the City's next 5-year Capital Plan (2013-2018). In 2012, warrantee work on the 2011 perimeter berm upgrade was started and will be completed in the summer of 2013. In 2012, work also continued on the Iqaluit Waste Management Project. This project will be completed in 2013 and includes:

- the development of a new Solid Waste Management Plan,
- the identification of a new solid waste management site, and
- the development of a Decommissioning Plan for the West 40 Landfill.

**Water License No. 3AM-IQA0611  
2012 Annual Report  
City of Iqaluit**

In July of 2006, the City of Iqaluit (City) was issued Water License number 3AM-IQA0611 (the License) by the Nunavut Water Board. This license was issued for a five-year period commencing on May 15, 2006. On June 17, 2011, the Nunavut Water Board amended the License expiry date to July 15, 2012. On October 2, 2012, the City submitted its Application for Water License Renewal. A requirement of the License is an annual report due March 31 of each year summarizing activities governed by the License for the previous calendar year. In accordance with Schedule B of the Water License, this Annual Water License Report summarizes the activities conducted by the City of Iqaluit in 2012.

**A. The monthly and annual quantities in cubic meters of water obtained from Lake Geraldine**

Table 1 summarizes the monthly and annual quantities of water drawn from Lake Geraldine, the City of Iqaluit's raw water source. The total water usage for 2012 was 871,670 m<sup>3</sup>, which is below the maximum allowable usage of 1,100,000 m<sup>3</sup>.

**Table 1. Raw Water Drawn  
from Lake Geraldine Reservoir (2012)**

<b>Month</b>	<b>Volume (m<sup>3</sup>)</b>
January	77,210
February	67,740
March	80,740
April	72,780
May	73,010
June	67,990
July	70,620
August	68,460
September	68,860
October	75,370
November	73,910
December	74,980
<b>Total</b>	<b>871,670</b>

**B. The monthly and annual quantities in cubic meters of discharge from the Wastewater Treatment Facility**

Table 2 summarizes the monthly and annual quantities of discharge from the City of Iqaluit's Wastewater Treatment Plant (WWTP) during 2012.

**Table 2. Discharge from the Wastewater Treatment Plant (2012)**

<b>Month</b>	<b>Volume (m<sup>3</sup>)</b>
January	63,195
February	61,793
March	72,264
April	67,683
May	71,834
June	69,374
July	75,673
August	73,684
September	79,255
October	77,312
November	68,446
December	68,481
<b>Total</b>	<b>848,994</b>

During periods when the WWTP was shutdown for maintenance, raw sewage was diverted to the backup sewage lagoon. The knife gate valve that diverts the sewage to the sewage lagoon is not equipped with a monitoring device; therefore, there were no measurements taken to determine the amount of discharge for the days that the WWTP was not operational. As a result, the amount of discharge for the duration of each shutdown was calculated using average daily discharge rates. The average daily total was determined by dividing the total volume of discharge from the WWTP recorded for the month that the shutdown occurred by the number of days the WWTP was operational that month. The dates of each shutdown can be found in Section F.

**C. The monthly and annual quantities in cubic meters of sludge removed from the Wastewater Treatment Facility**

Table 3 summarizes the estimated monthly and annual quantities of sewage sludge removed from the City of Iqaluit's WWTP and deposited at a designated area in the West 40 Landfill.

**Table 3. Sewage Sludge Removed from the Wastewater Treatment Facility and Deposited at the West 40 Landfill (2012)**

<b>Month</b>	<b>Volume (m<sup>3</sup>)</b>
January	51.0
February	47.6
March	51.0
April	51.0
May	54.4
June	51.0
July	51.0
August	51.0
September	51.0
October	54.4
November	47.6
December	51.0
<b>Total</b>	<b>612.0</b>

The sludge that is removed by the Salsnes Filter in the WWTP falls into a trailer in a room below the primary treatment room. The trailer that is used to catch the sludge from the Salsnes Filter has 3.4 cubic meters of storage and is approximately 100% full each time it is unloaded. The trailer is unloaded at the West 40 Landfill every second day including weekends and holidays. The difference in volume from month to month is due to two different factors: 1) every month doesn't have the same number of days, and 2) during the shutdowns there is no sludge produced because the raw sewage was diverted to the lagoon.

**D. A summary report which includes all data and information generated under the Monitoring Program, including the QA/QC program, in an electronic and printed format acceptable to the Board**

In 2008, the City submitted a Monitoring Program to the Nunavut Water Board for approval. As of 2012, the City has not received a response on this program. In 2012, the City initiated a Monitoring Program based on the requirements outlined in Schedule C of the License (see Appendix A for the 2012 sampling schedule). Sample bottles were ordered from an accredited laboratory in Ottawa and shipped to Iqaluit. Samples were taken by City staff and sent back to the laboratory the same day. Some tests results could not be obtained for certain months due to errors by the laboratory or the shipping company. Please see Appendix B for a summary of the samples taken and a copy of all of the sample reports provided by the laboratory and a list of samples that were missed in 2012. During a review of the 2012 program, it was determined that a few tests were missing from the Monitoring Program (Fecal Coliform, pH and Turbidity were missing from the raw water test and TSS and pH were missing from the influent and effluent to the Wastewater Treatment Plant). In order to meet the requirements of its License, the City will add these tests to the 2013 Monitoring Program (see Appendix C for the 2013 sampling schedule). A new landfill parameter section has also been added based on the recommendations made in the West 40 Landfill Drainage Management Review Report submitted on September 30, 2011. The City has not been able to find a laboratory that can complete the required chlorinated paraffin analysis in wastewater samples taken from the Wastewater Treatment Plant. The City has asked for a laboratory recommendation from the Nunavut Water Board but they were unable to identify a laboratory that could complete the required chlorinated paraffin analysis. As a result, this test has not been included in the 2013 Monitoring Program schedule.

A summary report for the 2012 Monitoring Program is currently under development and will be submitted to the board by August 31, 2013.

In December 2012, the City also undertook the development of a Quality Assurance/ Quality Control Plan and Monthly Report Template for the Monitoring Program, which are expected to be complete in early 2013. In 2013, the City plans to begin submitting Monthly Monitoring Reports as per the requirements of its License.

**E. A summary of construction activities conducted**

Lake Geraldine Dam Berm Repairs

The repair to the Lake Geraldine Dam Berm was undertaken in 2012 and was substantially completed on October 10, 2012. The project addressed recommendations in the 2011 Lake Geraldine Dam Safety Inspection to provide long-term stability to the berm. This repair included removing existing rip-rap,

installing new geotextile fabric along the top of the rock fill and reinstating the rip-rap. Please see Appendix D for a copy of the as-built drawings.

#### Landfill Water Management Upgrades Warrantee Work

In June of 2012, the City noted warrantee issues with the berm and has been working with the engineering firm managing the project to have them addressed under the project warrantee. The engineering firm felt that the issue with the berm should not pose risk of an imminent failure and directed that the repair work be delayed until the end of the summer to allow the berm to stabilize. Based on review and direction from the engineering firm managing the project, the repair work began in the fall of 2012 and will be completed in the summer of 2013. See Appendix E for a summary of the berm repairs timeline. Once the repairs are complete, as-built drawings will be issued and submitted to the NWB.

#### **F. A summary of any modification and/or major maintenance work and/or demolition work carried out and any associated structures**

##### Wastewater Treatment Plant

The following maintenance work was carried out at the WWTP in 2011:

<b>February 14, 2012:</b>	The filter in the Salsnes Filter was replaced.
<b>July 3, 2012:</b>	The filter in the Salsnes Filter was replaced.
<b>August 28, 2012:</b>	The filter in the Salsnes Filter was cleaned.
<b>November 4-6, 2012:</b>	The filter in the Salsnes Filter was replaced.
<b>November 9, 2012:</b>	The filter cartridge in the Salsnes Filter was repaired.
<b>December 24, 2012:</b>	The filter in the Salsnes Filter was replaced.

During the above listed maintenance work, the WWTP was shut down and the sewage was diverted to the sewage lagoon. In November, Public Works staff noticed that the Salsnes Filter cartridge was damaging the filters; this is the reason that the filters were replaced so many times in 2012.

##### West 40 Landfill

In 2012, some hazardous goods from the West 40 Landfill were shipped south for recycling or disposal. Approximately 215 batteries were taken by Gestion Logistique, a metal recycling company, and transported to southern Canada for recycling. In addition, 3690 kg of CARUS UPZ (acid) was shipped to GFL.

Environmental East Corp. in Pickering, Ontario, to be disposed of properly. The hazardous material was packed in sealed containers as per Transport Canada's Transportation of Dangerous Goods Regulation. Documentation on the transportation of the acid to GFL Environmental East Corp can be found in Appendix F.

#### Water Main Break

On January 12, 2012, a larger water main break occurred at the junction of a service connection and the City of Iqaluit's water main. This break caused the water levels in the treated water storage tanks dropped below the minimum water level required for the Water Treatment Plant's automated system to produce water. Water was produced for the next 48 hours by manually chlorinating the water until the water levels in the storage tanks were high enough to switch water production back to the automated system. Please see Appendix G for a full report on this incident.

### **G. A summary of all work carried out under the Managements Plans in accordance with this License**

#### Lake Geraldine Dam Safety Inspections

In July 2012, a Dam Safety Inspection (DSI) was performed on Lake Geraldine Dam. The DSI report can be found in Appendix H.

#### Sewage Lagoon Dam Safety Review Requirement Investigation

In June 2012, a Sewage Lagoon Dam Safety Review Requirement Investigation was completed to review whether a Dam Safety Review is required for this facility. This work revealed that the City's Sewage Lagoon is classified as a Low Risk Dam as per the Canadian Dam Safety Guidelines (DSG) and, as a result, does not require a Dam Safety Review. A letter from the engineering firm who completed this investigation is available in Appendix I.

As per the requirements of the Water License, the City must complete a Dam Safety Inspection on the Sewage Lagoon bi-annually; the next Dam Safety Inspection is scheduled for 2013 (the last inspection was completed in 2011).

#### Solid Waste Management Plan

In 2011, the City began the Solid Waste Management Project, which involves extensive public consultation and technical analysis to develop a new solid waste management plan and identify a new solid waste management site. The Project also involves the development of a decommissioning plan for the West 40 Landfill and an update of its operation and maintenance manual.

In 2012, work continued on the options analysis and site selection. A final newsletter and public meeting are planned for 2013 to give the public an opportunity to provide feedback on the recommended program.

#### Lake Geraldine Dam Emergency Preparedness Plan

In 2012, work on the Emergency Preparedness Plan (EPP) continued, including the:

- Definition of hazards posed by the dam;
- Identification of roles and responsibilities; and,
- Completion of inundation mapping.

The EPP is a requirement from the 2011 Dam Safety Inspection and is expected to be completed in 2013.

**H. A progress report and revisions to any studies requested by the Board that relate to waste management, water use or reclamation and a brief description of any future studies planned by the Licensee including, an executive summary in terms understandable to the general public, translated into Inuktitut**

#### Water Balance

In 2012, the City undertook the development of a Water Balance study for Lake Geraldine watershed. The Water Balance Report with assessment of recharge needs will be submitted to the NWB when it is completed in 2013.

This is a requirement of the License (Part B, Item 3).

#### Supplementary Water Supply Plan

The City's 2010 General Plan identifies Apex River as a potential supplementary water source for the City. In 2012, the City also undertook the development of a Supplementary Water Supply Plan and Preliminary Design. This work also includes a feasibility study to confirm that Apex River is a suitable source. An Executive Summary of for this project can be found in Appendix J. When this plan is completed, it will be submitted to the NWB along with the necessary Application for Amendment.

**I. Any addendums to the approved Contingency Plans and the approved Operation and Maintenance Manuals**

In 2012, no addendums were made to the approved Contingency Plans and Operation and Maintenance Manuals.

**J. A list and description of all spills and un-authorized discharges, including volumes, Spill Report Line Identification Number and summaries of follow-up action taken**

Table 4 provides a summary of all spills and un-authorized discharges that occurred in 2012, including volumes, Spill Report Line Identification Number and summaries of the follow-up actions taken. Copies of the spill reports and a map showing all spill locations can be found in Appendix K.

**Table 4: Summary of all spills and unauthorized discharges in 2012**

<b>Spill No.</b>	<b>Date</b>	<b>Location</b>	<b>Description</b>	<b>Volume (m<sup>3</sup>)</b>	<b>Cause</b>	<b>Follow-up Actions</b>
2012003	1/9/2012	House No. 2588	Heating Fuel	0.002	A backing up truck hit the home heating fuel tank	The City of Iqaluit emergency crews removed the contaminated soil and hauled it to Nunatta Environmental disposal yard.
2012090	3/24/2012	AV 341, 2700 Block, City of Iqaluit	Sewage	3.0	Sewage was trickling out of the top of Access Vault 341 in the block of 2700 due to the blockage of the sewage line with grease and rags.	A sewage blaster was employed to blast the line between AV 341 and AV 349 and reestablish flow. The contaminated soil and ice was removed from the site and dumped into the sewage lagoon.
2012091	3/24/2012	AV 402 City of Iqaluit	Sewage	1.0	Rags blocked sewage main	Rags were removed from the sewage line and contaminated soil around the AV was removed and contaminated ice and snow were disposed of to the City's sewage lagoon.
2012092	3/26/2012	Access	Sewage	2.0	Partially	The sewage was

		Vault 402, Iqaluit			Blocked sewer main.	pumped and blasted to clean the spill, which was disposed of to the City's Sewage lagoon.
2012110	4/4/2012	Access Vault 402 near Northmart	Sewage	5.0	Partially blocked sewer main	The sewage was pumped out of the AV and the sewage line was blasted by Utilidoor Crews. The contaminated sewage, soil, ice were disposed of in the Sewage Lagoon.
2012146	4/26/2012	AV 333	Sewage	5.0	Blockage of the sewer line due to presence of rags	The sewage was pumped out of the AV, the line was blasted and the contaminated soil, ice including sewage were transported to the Sewage Lagoon
2012229	6/8/2012	Sewage line between Lift station #2 and MH 23.	Sewage	1.0	Partially blocked sewer main	The spilled sewage was pumped into truck and transported to the Sewage Lagoon. The contaminated ice and snow were also removed and dumped in to the Sewage Lagoon.

**K. Any revisions to approved Closure and Reclamation Plans**

In 2012, no revisions were made to approved Closure and Reclamation Plans.

**L. A summary of any closure and reclamation work undertaken and an outline of any work anticipated for the next year, including and changes to implementation and scheduling.**

In 2012, no closure and reclamation work was undertaken. No closure or reclamation work is anticipated for 2013.

**M. A summary of actions taken to address concerns or deficiencies listed in the inspection reports and/or compliance reports filed by an Inspector****Water License Inspection July 3, 2012****One UV filter light was not functioning**

A technician was consulted and came to Iqaluit in November. He repaired the UV light that was not functioning and also serviced the working UV light. Both UV lights are now operational.

**Gaseous Chlorine Training for staff is out of date**

The Public Works Department found an online HAZWOPER course that covered the topic of Gaseous Chlorine Clean-up. The course will be completed by the summer of 2013.

**Sludge Waste Management Manual was not at the Wastewater Treatment Plant for review**

A copy of the Sewage Sludge Operation and Maintenance Manual was placed at the Wastewater Treatment Plant prior to the water license inspection on October 1, 2012.

**Sewage Sludge facility at the West 40 Landfill is not contained on a liner**

The Operation and Maintenance Manual for Sewage Sludge Composting does not require that the sewage sludge facility at the West 40 landfill be contained on a liner. The run-off in the West 40 Landfill, including the

sewage sludge area, is managed and collected using berms and on-site detention ponds.

**Hazardous materials are being improperly segregated and stored**

Prior to the October 1, 2012 inspection, hazardous materials were segregated and stored in a designated area within the landfill. Materials such as batteries, paint and any waste that reacts with water are stored in sea cans. Barrels of unknown waste, adhesives and small propane canisters are stored outside.

**Provide proper safety equipment, spill containment and clean-up materials to the Water Treatment Plant and West 40 Landfill**

The Water Treatment Plant and West 40 Landfill staff members have the required safety equipment and both facilities have the required spill containment and clean-up materials.

**Water License Inspection October 2, 2012**

**Failure to complete Annual Reports as required**

The 2011 Annual Water License Report was submitted to the Nunavut Water Board on November 1, 2012. The outstanding 2007 and 2008 reports will be submitted in 2013.

**Failure to file an application for renewal one year prior to the expiry of the license**

The application for license renewal was submitted on October 2, 2012.

**Failure to submit Operation and Maintenance Manual for the Wastewater Treatment Facilities by Dec 31, 2007**

The Nunavut Water Board acknowledged the receipt of the Wastewater Treatment Plant Operation and Maintenance Manual on November 1, 2011.

**Failure to submit the Final Assessment of the Sludge Management Pilot Project within 30 days following notification in accordance with part E (3d)**

The Nunavut Water Board acknowledged receipt of the Final Assessment of the Sludge Management Pilot Project on November 1, 2011.

**Failure to take such measures as is required to come into compliance with the issued License (Storage of Hazardous Materials)**

Hazardous materials are segregated and stored in a designated area within the landfill. Materials such as batteries, paint and any waste that reacts with water are stored in sea cans. Barrels of unknown waste, adhesives and small propane canisters are stored outside. Each year, the City has been trying to ship some of its hazardous waste to southern accredited disposal facilities.

**Failure to submit a plan to address contaminated soils within the Municipality**

The City does not accept contaminated soil at the West 40 Landfill. Private companies accept contaminated soil.

**Failure to submit a report on the options available to the Licensee to address the issue of collection, treatment and release of West 40 Landfill Waste Water prior to any discharge**

The Iqaluit West 40 Landfill Drainage Management Review Report, which addresses collection, treatment and release of runoff was submitted and confirmed as received on September 21, 2011.

**Failure to design, submit for approval and fully implement the Monitoring program as required by the current license**

A Monitoring Program was designed and submitted to the Nunavut Water Board in 2008; the City of Iqaluit is still waiting for approval. See Section D of this report for a summary of the status of the City's current Monitoring Program.

**Install and maintain sufficient signage**

Monitoring Program identification signs have been posted for the Water Treatment Plant (IQA-01), Wastewater Treatment Plant Influent (IQA-05) and the Wastewater Treatment Plant Sludge (IQA-06). In the spring of 2013, signs for the Sewage Lagoon (IQA-02), Wastewater Treatment Plant Effluent (IQA-04) and the Landfill (IQA-08) final discharge points will be installed. These remaining signs have been constructed but cannot be installed until the ground thaws.

**Failure to Submit a QA/QC Plan**

The development of a QA/QC plan was initiated in December 2012. The plan is expected to be complete in spring of 2013.

**Failure to develop and implement a "Monthly General Monitoring Program" with monthly submissions to the Nunavut Water Board**

See Section D of this report for a summary of the status of the City's current Monitoring Program.

**Failure to treat effluent to meet discharge quality set out in the license and failure to ensure undiluted effluent is non-acutely toxic**

See update in Section O of this report below.

**Failure to submit as-built or stamped drawings as required by the Wastewater Treatment Plant**

These drawings were submitted with the City's Application for Water License Renewal on October 2, 2012.

**Failure to submit the required conceptual A&R Plan as required by the license**

A conceptual A&R Plan for the West 40 Landfill is being completed as part of the Iqaluit Solid Waste Project (see section G of this report for additional information on this project). This plan will be submitted to the Nunavut Water Board in 2013 once it is complete.

**One UV filter light was not functioning at the time of inspection**

A technician was consulted and came to Iqaluit in November, he repaired the UV light that was not functioning and also serviced the working UV light. Both UV lights at the Water Treatment Plant are now operational.

**Water Sampling and daily testing records were found to be incomplete**

The daily Water Treatment Plant testing records were complete at the time of inspection. The tests for the Monitoring Program were incomplete as the fecal coliform test was not completed. This has been corrected for the 2013 Monitoring Program (see Appendix C for the 2013 Monitoring Program schedule). See Section D of this report for a summary of the status of the City's current Monitoring Program.

**A sludge waste management manual was not at the Wastewater Treatment Plant for review**

A copy of the Operation and Maintenance Manual was on site at the time of the inspection.

**Sewage Sludge facility at the West 40 Landfill is not contained on a liner**

The Operation and Maintenance Manual for Sewage Sludge Composting does not require that the sewage sludge facility at the West 40 Landfill be contained on a liner. The run-off in the West 40 Landfill, including the sewage sludge area, is managed and collected using berms and on-site detention ponds.

**Work to the south-east berm has not been completed as per the engineered drawings**

The City hired an engineering firm to complete the engineering design, tendering assistance, contract management and construction supervision for this project. Work on the south-east berm at the West 40 landfill was completed based on stamped engineering drawings in 2011 (see the City's 2011 Annual Report for a copy of the stamped engineering design). See Section E of this report for information on warrantee work completed on this project.

**Evidence of overtopping of the south-east berm**

There was no overtopping of landfill run-off over the south-east berm. If overtopping had occurred the City would have filed a spill report with the Spill Report Line.

**Sampling results for landfill run-off exceed the CCME Guidelines and has failed to provide a plan for treatment**

The City submitted the Iqaluit West 40 Landfill Drainage Management Review Report to the Inspector on September 21, 2011. This report examined treatment options and also identified appropriate discharge criteria. Based on this report, a project to increase the level of landfill run-off treatment was included in the City's (successful) Government of Nunavut Block Funding request (see Section O for more information) and will be included in the City's next 5-year Capital Plan (2013-2018).

**The fence that surrounds the landfill facility was down in locations**

A portion of the fence was removed to complete warrantee work on the south-east berm. The fence was reinstated when the contractor was finished working at the site.

**N. Update on implementation of recommendations from any Dam Safety Inspection and/or Review**

The following list summarizes the recommendations from 2012 Lake Geraldine Dam Safety Inspection along with an update on implementation:

- Complete the Lake Geraldine Dam Berm Repairs by October 2012.
  - This project was completed on October 10, 2012. See Section E for more information.
- Continue to monitor for signs of leakage at the North berm access ramp area.
  - The City is continuing to monitor leakage with the help of Concentric Associates.
- Monitor construction joint leakage.
  - The City is continuing to monitor leakage with the help of Concentric Associates.
- The LG Dam requires an updated DSR by June 2014 at the latest.
  - The City is planning to complete a DSR in 2013.
- Complete the next DSI prior to October 2013.
  - The City is planning to complete a DSR in 2013, therefore a DSI will not be required.

**O. A brief update on the implementation plan of all facilities within the scope of this License including projected implementation and status of Phase II of the Wastewater Treatment Plant**

New Solid Waste Management Facilities

Iqaluit's new Solid Waste Management Plan will be completed and submitted to the NWB in 2013. Based, on this plan, work will begin on the engineering design for the new solid waste management facility.

Phase 2 Wastewater Treatment Plant Upgrade

The City has been proactively seeking the funding required to complete the Phase 2 WWTP upgrades needed to come into compliance with its License. In 2011, the City completed a Needs Assessment to identify the City's short, medium and long-term capital project needs. A risk assessment and funding gap analysis were then performed on all short-term projects in order to prioritize the projects and identify the City's capital funding needs for the 2012-2018 period. The identified high and medium priority projects (which included the Phase 2 WWTP upgrade) formed the basis of the City's Block Funding request to the Government of Nunavut. This Block Funding request asked for \$17 million to cover the funding gap for the City's high and medium priority short-term capital projects.

On November 6, 2012, the City was notified that its Block Funding proposal was successful (\$3.4 million approved for 2013/2014 Fiscal year, to be renewed annually for 4 additional years). This \$17 million Block Funding contribution from the Government of Nunavut will allow the City to proceed with the projects that are required to achieve compliance its License including the Phase 2 WWTP upgrades.

The City is currently working with the Government of Nunavut to finalize the Contribution Agreement for this funding. In 2013, the City plans to complete a 5-year Capital Plan, which will outline the timeline and cash flow for the completion of its priority short-term capital projects, which includes the required WWTP upgrades.

**P. Any details on water use or waste disposal requested by the Board by November 1<sup>st</sup> of the year being reported**

There were no requests made by the Board after November 1, 2012.

## **Appendices**

Appendix A - 2012 Monitoring Program Sampling Schedule

Appendix B - 2012 Monitoring Program Sampling Summary

Appendix C - 2013 Monitoring Program Sampling Schedule

Appendix D - Lake Geraldine Dam Berm Repairs As-built Drawing

Appendix E – West 40 Landfill Berm Warrantee Issues Summary

Appendix F - Hazardous Materials Transportation Documentation

Appendix G - Water Main Break Report January 12, 2012

Appendix H - Lake Geraldine Dam 2012 Dam Safety Inspection

Appendix I - Sewage Lagoon Dam Safety Review Requirements

Appendix J - Supplementary Water Supply Plan Executive Summary

Appendix K - Spill Location Map and Spill Reports